

CLAIMS

1. (Currently Amended) A guide for ~~reciprocating~~ reciprocation of an extension member of a plunger in a downhole pump, comprising:
 - a) a first segment having a first end structured and arranged to couple to a barrel of the pump;
 - b) a second segment having a bushing stop at a second end;
 - c) the first and second segments coupled together such that the distance between the first and second ends can be adjusted, the first and second segments having a passage therethrough for receiving the extension member.
2. (Original) The guide of claim 1 wherein the first and second segments are coupled together by threads, wherein the first segment has first threads and the second segment has second threads.
3. (Original) The guide of claim 2 further comprising:
 - a) a stop nut located on one of the first or second threads;
 - b) a stop surface located on the other of the first or second segments for cooperating with the stop nut.
4. (Original) The guide of claim 1 wherein the first segment has openings from the passage to an outside diameter.

5. (Original) The guide of claim 1 wherein:
 - a) the first end comprises third threads for coupling to the pump barrel;
 - b) the second end comprises a fishing neck;
 - c) the first segment has first threads and the second segment has second threads, the first and second segments coupled to each other by the first and second threads;
 - d) a stop nut located on one of the first or second threads;
 - e) a stop surface located on the other of the first or second segments, for cooperating with the stop nut.
6. (Original) A downhole pump, comprising:
 - a) a barrel having a first end and a second end, with a standing valve located near the second end and a guide coupled to the first end, the guide having a free end;
 - b) a plunger located in the barrel and structured and arranged to reciprocate therein, the plunger having an extension member that is received by the guide;
 - c) a bushing located on the extension member and structured and arranged to contact the free end of the guide;
 - d) the free end of the guide being adjustable in distance relative to the first end of the barrel.

7. (Original) The pump of claim 6 wherein the free end of the guide is coupled with the barrel by a threaded fitting and a stop nut.
8. (Original) A method of assembling a pump, comprising the steps of:
 - a) inserting a plunger and an extension member of the plunger into a barrel, the plunger forming a compression chamber inside of the barrel, the extension member extending out of the barrel;
 - b) coupling a guide onto the end of the barrel such that the extension member passes through the guide, the guide having a free end, the free end of the guide being spaced from the barrel end by a distance;
 - c) coupling a bushing to the extension member, the bushing being structured and arranged to contact the free end of the guide;
 - d) adjusting the distance of the free end of the guide so as to adjust the size of the compression chamber.
9. (Original) The method of claim 8 wherein the step of adjusting the distance of the free end of the guide further comprises the step of retaining the position of the free end of the guide.